DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017269 Address: 333 Burma Road **Date Inspected:** 04-Oct-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Mr. Huang min **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Weld Procedures Followed:** N/A **Electrode to specification:** No Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY-2

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint E5-SB1-051-126~131. Welder is identified as 062708. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint E5-SB1B-005-081,019,050. Welder is identified as 066398. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U4b-F.

FCAW of weld joint E5-SB1-004-126~131. Welder is identified as 066398. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-3.

FCAW of weld joint FB3321-001-011. Welder is identified as 045209. ZPMC Quality Control (QC) is identified

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as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2232-TC-U4b-F.

FCAW Repair welding of weld joint VP3014-001-030. Welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Zhu Jun. The welding variables appeared to comply with the Applicable WPS: WPS-345-FCAW-2G (2F)-FCM-Repair. The repair welding was being performed as per the Caltrans Engineer approved Critical Welding Repair Report (CWR) No: B-CWR1980. This weld was rejected by ZPMC UT Technicians and recorded on UT report No: B787-UT- UT-16565.

BAY-3

FCAW of weld joint FB3271-001-101,102. Welder is identified as 214945. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2132-3.

FCAW of weld joint FB3271-001-101,102. Welder is identified as 217805. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2132-3.

FCAW of weld joint FB3273-001-016,017. Welders are identified as 055564 and 206623 respectively. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2232-TC-U4b-F.

ZPMC personnel heat straightening OBG member identified as FB3287-001. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Zhan hai feng was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) HSR1 (B) 9520.

During random in process inspection of OBG member identified as Floor beam FB3271A, this QA observed Porosities on weld joint identified as FB3271-001-102. This QA marked the Porosities and informed ZPMC Quality Control (QC) indentified as Mr. Zhan hai feng of this issue. Mr. Zhan hai feng informed this QA that the Porosities would be corrected in a manner compliant with the contract documents prior to start the next weld pass. Refer the attached photos for reference.

BAY-7

FCAW of weld joint FB3246-002-015,016. Welder is identified as 204342. ZPMC Quality Control (QC) is identified as Mr. Xu hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2133.

FCAW of weld joint W2-SB1G-015-063~074. Welder is identified as 205386. ZPMC Quality Control (QC) is identified as Mr. Xu hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2133.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

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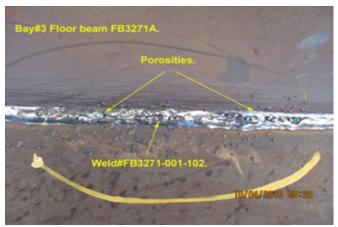
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documents.











Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer